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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,575	01/25/2002	Xian J. Ning	01-P-18264 US	1882

7590 05/02/2003

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EXAMINER

TALBOT, BRIAN K

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,575

Applicant(s)

NING, XIAN J.

Examiner

Brian K Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The pre-amendment filed 1/28/03 has been considered and entered. Claims 1-20 remain in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al. (2002/0153551).

Wong et al. (2002/0153551) teaches a method of making a metal-insulator-metal capacitor using plate-through mask techniques. The method includes depositing an ILD layer, forming trenches therein by damascene process, depositing a conductive liner and a seed layer,

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covering the area for MIM with a resist and depositing a metal layer in the other trenches, removing the resist, forming dielectric layer and subsequent conductive layers and finally the layers are planarized. The metal layers are formed by CVD, PVD plating and consist of W, Cu, Ti, TiW, TiN, etc. The conductive liner is TaN or Ta. (col. 2, [0029] – col. 3, [0040])

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.



Brian K Talbot
Primary Examiner
Art Unit 1762

BKT
April 29, 2003

L Number	Hits	Search Text	DB	Time stamp
1	5205	metal-insultor-metal or MIM or MIMcap	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 11:35
2	775	(metal-insultor-metal or MIM or MIMcap) near capacitor\$1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:26
3	6	((metal-insultor-metal or MIM or MIMcap) near capacitor\$1) near vertical	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 11:42
4	6	(metal-insultor-metal or MIM or MIMcap) near vertical	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 11:42
5	524108	(metal-insultor-metal or MIM or MIMcap) adjr capacitor\$1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:26
6	708	(metal-insultor-metal or MIM or MIMcap) adj capacitor\$1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:26
7	7399	((metal-insultor-metal or MIM or MIMcap) adj capacitor\$1) damascene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:26
8	91	((metal-insultor-metal or MIM or MIMcap) adj capacitor\$1) and damascene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:29
9	13	MIMcap	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:43
10	1	((metal-insultor-metal or MIM or MIMcap) near capacitor\$1) near resist	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/04/29 12:43